



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,796	09/11/2003	David Arditi	P1895US	5241

8968 7590 12/07/2006

GARDNER CARTON & DOUGLAS LLP  
ATTN: PATENT DOCKET DEPT.  
191 N. WACKER DRIVE, SUITE 3700  
CHICAGO, IL 60606

EXAMINER

YALEW, FIKREMARIAM A

ART UNIT PAPER NUMBER

2136

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/659,796	<b>Applicant(s)</b> ARDITI ET AL.	
	<b>Examiner</b> Fikremariam Yalew	<b>Art Unit</b> 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/12/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-14 have been examined.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 8-11 are rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter.

4. Claims 8-11 are directed to a client station having authentication resources with respect to an electronic signature assistance server. The examiner respectfully asserts that the claimed subject matter does not fall within the statutory classes listed in 35 USC 101. Claims 8-11 are directed to functional descriptive material (i.e. software). Claims 8-11 are rejected as being directed to functional descriptive material. (i.e., computer program)

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim rejected under 35 U.S.C. 103(a) as being unpatentable over Holloway (US Patent 6,424,718 B1) in view of Gehrmann (US Pub No 2004/0103316 A1).

7. As per claims 1,8: Holloway discloses a method/computer program for applying an electronic signature from a client station, comprising the steps of: /A/ authenticating the client station at a server, thereby establishing an authenticated communication channel between the client station and said server (Col 4 lines 1-9); /B/ generating a private key/public key pair at the client station (Col 3 lines 52-59 and col 3 lines 23-33); /C/ sending from the client station to the server, via the authenticated channel, a request for a signature certificate, generated by means of at least the public key(See col 4 lines 1-33); /D/ sending from the server to the client station, via the authenticated channel, a signature certificate provided in response to said request(See col 4 lines 1-33); /E/ calculating a cryptographic signature at the client station by means of the private key, then destroying the private key at the client station(col 3 lines 28-50 and col 4 lines 34-55); and

Holloway does not explicitly teach /F/ formatting the calculated signature with the aid of the signature certificate received by the client station via the authenticated channel (col 3 lines 28-50).

However Gehrmann disclose formatting the calculated signature with the aid of the signature certificate received by the client station via the authenticated channel (See 0040,0019-0020).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the an electronic signature from a client

Art Unit: 2136

station disclosed by Holloway to include formatting the calculated signature with the aid of the signature certificate received by the client station via the authenticated channel. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Gehrman in order (See 0010) to provide a solution to problem of securing a communication channel between two communication peers not having a predefined secure relation.

8. As per claim 2: the combination of Holloway and Gehrman disclose the method wherein steps /C/ and /E/ are executed in parallel at the client station (See Holloway col 4 lines 1-33 and col 4 lines 34-55).

9. As per claim 3: the combination of Holloway and Gehrman disclose wherein steps /B/, /C/, /E/ and /F/ are at least partially executed at the client station under the control of a program downloaded from the server in response to step /A/. (See Holloway col 3 lines 28-50)

10. As per claim 4: the combination of Holloway and Gehrman disclose the method wherein step /A/ comprises mutually authenticating the server and the client station (See Holloway col 4 lines 1-9).

11. As per claim 5: the combination of Holloway and Gehrman disclose the method comprising the further step of verifying, at the client station, the signature certificate received via the authenticated channel (See Holloway col 4 lines 33-55 and col 7 lines 22-47).

Art Unit: 2136

12. As per claim 6: the combination of Holloway and Gehrmann disclose wherein the signature certificate obtained by the server has a validity period of at most one day (See Holloway col 7 lines 22-67).

13. As per claim 7: the combination of Holloway and Gehrmann disclose the method comprising the preliminary step of registering the client station with respect to a certification authority with which the server cooperates, or with respect to a registration authority associated with said certification authority (See Holloway col 4 lines 23-32).

14. As per claim 9: the combination of Holloway and Gehrmann disclose a Computer program product wherein the instructions for transmitting the signature certificate request and the instructions for calculating the electronic signature and then for destroying the private key are executable in parallel (See Holloway col 4 lines 34-55).

15. As per claim 10: the combination of Holloway and Gehrmann disclose a Computer program product wherein at least some of said instructions form part of a program written in a mobile code language and downloadable from said server (2) after establishment of the authenticated channel (See Holloway col 3 lines 28-50).

16. As per claim 11: the combination of Holloway and Gehrmann disclose a Computer program product wherein said instructions further include instructions for verifying the signature certificate received via the authenticated channel (See Holloway col 4 lines 33-55 and col 7 lines 22-47).

17. As per claim 12: Holloway discloses Electronic signature assistance server, comprising means of authenticating a client station to establish an authenticated

Art Unit: 2136

communication channel with said client station, means for obtaining a signature certificate in response to a request received from the client station via the authenticated channel and for transmitting said certificate to the client station via the authenticated channel, and means for downloading to the client station a program written in a mobile code language, including instructions for controlling, at least partially, the execution of the following operations by the client station:

generation of a private key/public key pair at the client station after the establishment of the authenticated channel(Col 3 lines 52-59 and col 3 lines 23-33); transmission to the server, via the authenticated channel, of a request for a signature certificate generated by means of at least the public key(See col 4 lines 1-33); reception, via the authenticated channel, of the signature certificate transmitted by the server in response to said request(See See Holloway col 4 lines 1-33); calculation of a cryptographic signature at the client station by means of the private key, followed by destruction of the private key(See Holloway col 4 lines 34-55); and

Holloway does not explicitly disclose formatting of the calculated signature with the aid of the signature certificate received via the authenticated channel.

However Gehrman disclose formatting of the calculated signature with the aid of the signature certificate received via the authenticated channel(See 0040,0019-0020).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the an electronic signature from a client station disclosed by Holloway to include formatting the calculated signature with the aid of the signature certificate received by the client station via the authenticated channel.

Art Unit: 2136

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Gehrmann in order (See 0010) to provides a solution to problem of securing a communication channel between two communication peers not having a predefined secure relation.

18. As per claim 13: the combination of Holloway and Gehrmann disclose Assistance server wherein the signature certificate has a validity period of at most one day (See Holloway col 7 lines 22-67).

19. As per claim 14: the combination of Holloway and Gehrmann disclose Assistance server wherein said operations further comprise a verification of the signature certificate received via the authenticated channel (See Holloway col 4 lines 33-55 and col 7 lines 22-47).

### ***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fikremariam Yalew whose telephone number is 5712723852. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moazzami Nasser, can be reached on 5712738300. The fax phone number for the organization where this application or proceeding is assigned is 571-272-4195.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for



Art Unit: 2136

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

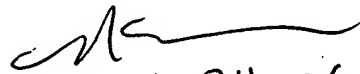
Fikremariam Yalew

11/21/06

FA

Art Unit 2136

NASSER MOAZZAMI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100



11,24,06